FILE 'REGISTRY' ENTERED AT 14:19:26 ON 23 MAY 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 MAY 2006 HIGHEST RN 885262-53-3 DICTIONARY FILE UPDATES: 22 MAY 2006 HIGHEST RN 885262-53-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

L1 7 S RGGRLSYSRRRFSTSTGR/SQSP

L1 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 745018-38-6 REGISTRY

CN L-Arginine, glycyl-L-arginylglycylglycyl-L-arginyl-L-leucyl-L-seryl-L-tyrosyl-L-seryl-L-arginyl-L-arginyl-L-arginyl-L-phenylalanyl-L-seryl-L-threonylglycyl- (9CI) (CA INDEX NAME)

SQL 19

SEQ 1 GRGGRLSYSR RRFSTSTGR

HITS AT: 2-19

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 141:230669

L1 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 590362-68-8 REGISTRY

CN L-Argininamide, glycyl-L-arginylglycylglycyl-L-arginyl-L-leucyl-L-seryl-L-tyrosyl-L-seryl-L-arginyl-L-arginyl-L-arginyl-L-phenylalanyl-L-seryl-L-threonylglycyl- (9CI) (CA INDEX NAME)

SOL 19

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1 GRGGRLSYSR RRFSTSTGR
SEO
           ______
HITS AT:
          2-19
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 139:219317
    ANSWER 3 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
1.1
     590362-66-6 REGISTRY
RN
CN
     Cyclosporin A, (6→1')-ester with N-[2-
     [(carboxymethyl)(phenylmethyl)amino]-2-oxoethyl]qlycyl-L-
     arqinylqlycylqlycyl-L-arginyl-L-leucyl-L-seryl-L-tyrosyl-L-seryl-L-
     arginyl-L-arginyl-L-arginyl-L-phenylalanyl-L-seryl-L-threonyl-L-seryl-
     L-theonylqlycyl-L-arginine (9CI) (CA INDEX NAME)
SQL
    30,19,11
        1 GRGGRLSYSR RRFSTSTGR
SEO
           _____
HITS AT:
          2-19
        1 XXXLVLAALL V
SEO
REFERENCE
           1: 139:219317
L1
     ANSWER 4 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
     279247-76-6 REGISTRY
RN
     D-Arginine, D-arginylglycylglycyl-D-arginyl-D-leucyl-D-seryl-D-tyrosyl-
CN
     D-seryl-D-arginyl-D-arginyl-D-arginyl-D-phenylalanyl-D-seryl-D-
     threonyl-D-seryl-D-threonylglycyl- (9CI) (CA INDEX NAME)
SQL
SEO
        1 RGGRLSYSRR RFSTSTGR
          HITS AT:
          1-18
**RELATED SEOUENCES AVAILABLE WITH SEOLINK**
REFERENCE
           1: 133:79176
     ANSWER 5 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
L1
RN
     273216-96-9 REGISTRY
     L-Arginine, N2-[[[(2S,5R,6R)-3,3-dimethyl-7-oxo-6-
CN
     [(phenylacetyl)amino]-4-thia-1-azabicyclo[3.2.0]hept-2-
     yl]carbonyl]oxy]acetyl]-L-arginylglycylglycyl-L-arginyl-L-leucyl-L-
     seryl-L-tyrosyl-L-seryl-L-arginyl-L-arginyl-L-arginyl-L-phenylalanyl-L-
     seryl-L-threonyl-L-seryl-L-threonylqlycyl- (9CI) (CA INDEX NAME)
SQL
    18
         1 RGGRLSYSRR RFSTSTGR
SEO
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HITS AT:
          1-18
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 138:192982
REFERENCE
           2: 133:12772
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ANSWER 6 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
L1
    273216-92-5 REGISTRY
RN
    L-Arginine, N2-(3-carboxy-1-oxopropyl)-L-arginylglycylglycyl-L-arginyl-
CN
    L-leucyl-L-seryl-L-tyrosyl-L-seryl-L-arginyl-L-arginyl-L-arginyl-L-
    phenylalanyl-L-seryl-L-threonyl-L-seryl-L-threonylglycyl-, 1-amide
     with (8S, 10S) -10-[(3-amino-2, 3, 6-trideoxy-α-L-lyxo-
    hexopyranosyl) oxyl -7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-
     (hydroxyacetyl) -1-methoxy-5,12-naphthacenedione (9CI) (CA INDEX NAME)
SOL
SEO
         1 RGGRLSYSRR RFSTSTGR
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HITS AT:
           1-18
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 134:256702
REFERENCE
           2: 133:26845
REFERENCE
           3: 133:12772
    ANSWER 7 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
L1
     220696-48-0 REGISTRY
RN
    L-Arginine, L-arginylqlycylqlycyl-L-arginyl-L-leucyl-L-seryl-L-tyrosyl-
CN
    L-seryl-L-arginyl-L-arginyl-L-phenylalanyl-L-seryl-L-
    threonyl-L-seryl-L-threonylqlycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
    10: PN: WOO3033021 SEQID: 10 claimed sequence
CN
    11: PN: WO2006028393 SEQID: 13 unclaimed sequence
CN
    12: PN: FR2829940 SEQID: 12 unclaimed sequence
CN
CN
    15: PN: JP2004035409 PAGE: 9 claimed sequence
    15: PN: WO02088318 PAGE: 42 unclaimed sequence
CN
    15: PN: WO03062447 SEQID: 15 unclaimed sequence
CN
    36: PN: US20060040879 SEQID: 36 claimed protein
CN
    88: PN: WO2004092339 SEQID: 116 claimed sequence
CN
    8: PN: US20040072340 SEQID: 10 claimed protein
CN
SQL
        1 RGGRLSYSRR RFSTSTGR
SEO
           HITS AT:
           1-18
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 144:305136
REFERENCE
REFERENCE
           2: 144:267264
REFERENCE
           3: 144:266578
REFERENCE
               144:254329
           4:
REFERENCE
           5: 141:390793
            6: 141:230669
REFERENCE
           7: 140:337902
REFERENCE
REFERENCE
            8: 140:158513
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REFERENCE 9: 139:376204

REFERENCE 10: 139:312219

FILE 'CAPLUS' ENTERED AT 14:19:29 ON 23 MAY 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 23 May 2006 VOL 144 ISS 22 FILE LAST UPDATED: 22 May 2006 (20060522/ED)

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http://www.cas.org/infopolicy.html

L2 24 L1

L2 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 17 Mar 2006

ACCESSION NUMBER: 2006:238575 CAPLUS

DOCUMENT NUMBER: 144:267264

TITLE: Improved Apo E analogs and methods for their use

INVENTOR(S): Vitek, Michael, P.; McKenna, Suzanne E.

PATENT ASSIGNEE(S): Cognosci, Inc., USA SOURCE: PCT Int. Appl., 177 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	rent :	NO.			KIN	D	DATE		1	APPL	ICAT	ION 1	NO.		D	ATE
						-				<del>-</del>	<del>-</del>				-	
WO	2006	0290	28		<b>A</b> 2		2006	0316	1	WO 2	005-1	US31	431		2	0050902
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
		ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		ŪĠ,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	zw						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	NL,	ΡL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,
		ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	$\mathbf{TM}$					

PRIORITY APPLN. INFO.: US 2004-606506P P 20040902

US 2004-606507P P 20040902

US 2004-608148P P 20040909

AB Novel ApoE peptide derivs. and ApoE-protein transduction domain conjugates are disclosed which are useful for treating disorders including CNS inflammation, traumatic brain injury, inflammatory bowel disease (also known as Crohn's Disease or ulcerative colitis), cerebral ischemia, atherosclerosis, sepsis, multiple sclerosis and arthritic diseases, Alzheimer's Disease and other brain disorders. The invention encompasses methods for protecting subjects having undergone irradiation or radiotherapy by administration of ApoE or at least one ApoE mimetic peptide.

IT 220696-48-0

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (improved Apo E analogs for therapeutic use)

L2 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 17 Mar 2006

ACCESSION NUMBER: 2006:237564 CAPLUS

DOCUMENT NUMBER: 144:305136

TITLE: Peptide modulators of integrin  $\beta$ 7 function

for treatment of inflammatory disease

INVENTOR(S): Krissansen, Geoffrey Wayne
PATENT ASSIGNEE(S): Auckland Uniservices, N. Z.
SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

CODEN: PIXXD

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT I	NO.			KIND DATE APPLICATION NO.						NO.		D2	ATE		
WO	2006	0283:	93		A1	_	2006	0316	1	WO 2	005-1	NZ234	4		20	0050909
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑŻ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
		ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		ŪG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw						
	RW:	ΑT,	ΒĒ,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,
		ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM					
PRIORITY	RIORITY APPLN. INFO.:									AU 2	004-	9051	53		A 2	0040909

The invention relates to peptides comprising at least the amino acid sequence YDRREY or a derivative thereof, nucleic acids encoding the peptides, pharmaceutical compns. and methods for modulating integrin  $\beta 7$  function, including methods for treatment of inflammatory disorders, antibodies directed to said peptides and methods for identification of integrin  $\beta 7$  functional interactors. Thus, a functional motif in the integrin  $\beta 7$  cytoplasmic domain (RLSVEIYDRREY) was identified which controls clustering and adhesion

of  $\beta 7$  integrins. This motif, corresponding to residues 729-740 of the transmembrane-proximal region of the cytoplasmic tail of integrin  $\beta 7$ , inhibits adhesion of  $\beta 7$  integrins to their ligands. So, this peptide inhibited integrin  $\alpha 4\beta 7$ -mediated adhesion of mouse TK-1, and human H9, T cells to MAdCAM-1, VCAM-1, and an RGD polymer.

IT 220696-48-0

RL: PRP (Properties)

(unclaimed sequence; peptide modulators of integrin  $\beta7$ 

function for treatment of inflammatory disease)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

2

ED Entered STN: 23 Feb 2006

ACCESSION NUMBER:

2006:164683 CAPLUS

DOCUMENT NUMBER:

144:254329

TITLE:

Chloroquine coupled nucleic acids and methods for

their synthesis as drug carriers

INVENTOR (S):

Kosak, Kenneth M.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 47 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006040879	A1	20060223	US 2004-923112	20040821
PRIORITY APPLN. INFO.:			US 2004-923112	20040821

This invention discloses compns. and methods for preparing AR chloroquine-coupled nucleic acid compns. The prior art has shown that chloroquines given as free drug in high enough concentration, enhances the release of various agents from cellular endosomes into the cytoplasm. The purpose of these compns. is to provide a controlled amount of chloroquine at the same site where the nucleic acid needs to be released, thereby reducing the overall dosage needed. The compns. comprise a chloroquine substance coupled to a nucleic acid directly or through a variety of pharmaceutical carrier substances. The carrier substances include polysaccharides, synthetic polymers, proteins, micelles and other substances for carrying and releasing the chloroquine compns. in the body for therapeutic effect. The compns. can also include a biocleavable linkage for carrying and releasing nucleic acids for therapeutic or other medical uses. The invention also discloses nucleic acid carrier compns. that are coupled to targeting mols. for targeting the delivery of nucleic acids to their site of action.

IT 220696-48-0

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(chloroquine-coupled nucleic acids and methods for their synthesis as drug carriers)

L2 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 20 Jan 2006

2006:57476 CAPLUS ACCESSION NUMBER:

144:266578 DOCUMENT NUMBER:

Prediction of cell-penetrating peptides TITLE:

Haellbrink, Mattias; Kilk, Kalle; Elmquist, Anna; AUTHOR (S):

Lundberg, Pontus; Lindgren, Maria; Jiang, Yang;

Pooga, Margus; Soomets, Ursel; Langel, Ulo

Department of Neurochemistry and Neurotoxicology, CORPORATE SOURCE:

Stockholm University, Stockholm, S-106 91, Swed.

International Journal of Peptide Research and SOURCE:

Therapeutics (2005), 11(4), 249-259 CODEN: IJPRFC; ISSN: 1573-3149

PUBLISHER: Springer DOCUMENT TYPE: Journal LANGUAGE: English

Cell-penetrating peptides, CPPs, are used as delivery vectors for pharmacol. interesting substances, such as antisense oligonucleotides, proteins and peptides. We present a general principle for designing cell-penetrating peptides derived from naturally occurring proteins as well as from randomly generated polyamino acid sequences. Thereby, we introduce a novel pharmacol. principle for identification of cell-penetrating peptides for which the applications can be numerous, including cellular transduction vectors and mimics of intracellular protein-protein interactions. The methods of identifying a CPP comprises assessing the averaged bulk property values of the defined sequence, and ensuring that they fall within the bulk property value interval obtained from the training set. Despite this simplistic approach, the search criteria proved useful for finding CPP properties in either proteins or random sequences. We have exptl. verified cell-penetrating properties of 10-20-mer peptides derived from naturally occurring proteins as well as from random poly-amino acids. We note that since CPPs can be found in part of the protein sequences that may govern protein interactions, it is possible to produce

IT 220696-48-0

> RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prediction of cell-penetrating peptides for drug delivery)

THERE ARE 17 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 17

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

ANSWER 5 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

cell-penetrating protein agonists or antagonists.

Entered STN: 29 Oct 2004

2004:905875 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:390793

TITLE: Compositions and methods for inhibiting binding of

> MUC1 to PDZ domains and uses in enhancing sensitivity of MUC1 expressing cancer cells to

chemotherapeutic agents

Belmares, Michael P.; Lu, Peter S.; Garman, INVENTOR(S):

Jonathan David; Jecminek, Albert A.; Kharbanda,

Surender; Agata, Naoki; Kufe, Donald W.

PATENT ASSIGNEE(S): Ilex Products, Inc., USA; Arbor Vita Corporation;

Dana-Farber Cancer Institute

PCT Int. Appl., 141 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO.
       PATENT NO.
                                  KIND
                                            DATE
                                                                                              DATE
                                   <del>-</del> - - -
                                             -----
                                                              -----
      WO 2004092339
                                   A2
                                             20041028
                                                             WO 2004-US11195
                                                                                              20040412
      WO 2004092339
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

APPLN. INFO::

US 2003-462111P P 20030-
                                   A3
                                             20050512
PRIORITY APPLN. INFO.:
                                                              US 2003-462111P
                                                                                          P 20030411
                                                              US 2003-467728P
                                                                                          P 20030502
                                                              US 2003-475595P
                                                                                          P 20030604
                                                              US 2003-502111P
                                                                                          P 20030911
                                                              US 2003-524188P
                                                                                          P 20031121
       The present invention provides compns. and methods for inhibiting the
AΒ
       binding of the carboxy-terminus of MUC1 to PDZ domain(s) and to
       enhance the sensitivity of MUC1 expressing cancer cells to
       chemotherapeutic agents. Specifically, the PDZ domains may suitably
      be ZO-1 d2, SIP1 dL, LIM MYSTIQUE, AIPC, KIAA0751, MAST2, PRIL-16 dL,
       GRIP2 d5, SITAC 18, NSP or KIAA1526 dL, and wherein the PDZ domain may
      be within a MUC1-expressing cancer. The method of enhancing the
       sensitivity of cancer cells to chemotherapeutic agents comprises
       contacting the cells with an effective amount of an agent that inhibits
       the binding of MUC1 to a PDZ domain.
IT
       220696-48-0P
       RL: BPN (Biosynthetic preparation); BSU (Biological study,
      unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (amino acid sequence; compns. and methods for inhibiting binding of
           MUC1 to PDZ domains and uses in enhancing sensitivity of MUC1
           expressing cancer cells to chemotherapeutic agents)
      ANSWER 6 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN
      Entered STN: 27 Aug 2004
ACCESSION NUMBER:
                                   2004:703078 CAPLUS
DOCUMENT NUMBER:
                                   141:230669
TITLE:
                                   Composition containing an active substance and a
                                   vector connected by a linking agent, their uses
                                   and the aforementioned linking agents
INVENTOR(S):
                                   Rees, Anthony R.; Mouchet, Patrick
                                   Synt:em, Fr.
PATENT ASSIGNEE(S):
                                   Fr. Demande, 65 pp.
SOURCE:
                                   CODEN: FRXXBL
DOCUMENT TYPE:
                                   Patent
LANGUAGE:
                                   French
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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DATE
      PATENT NO.
                              KIND
                                                         APPLICATION NO.
                                          DATE
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                                          -----
                                                       FR 2003-2242
WO 2004-FR413
                                                                                         20030224
      FR 2851471
                                 A1
                                          20040827
      WO 2004075922
                               A2
                                                                                         20040224
                                          20040910
           2004075922

A3 20050120

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

APPLN. INFO::

RW: BV: GH, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FR 2003-2242

A 200303
      WO 2004075922
                                 A3
                                          20050120
PRIORITY APPLN. INFO.:
                                                          FR 2003-2242
                                                                                    A 20030224
      The present invention relates to a compound comprising at least one
AB
      active substance and at least a vector, the aforementioned active
      substance and vector being connected by a linking agent, the use of
      the aforesaid compound for the preparation of a pharmaceutical composition,
the
      aforementioned pharmaceutical composition The present invention relates to
      also the aforementioned liaison officers.
      220696-48-0DP, conjugates with cyclosporin A
IT
      745018-38-6DP, conjugates with cyclosporin A
      RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
       (Biological study); PREP (Preparation); USES (Uses)
           (composition containing an active substance and a vector connected by a
          linking agent)
REFERENCE COUNT:
                                         THERE ARE 5 CITED REFERENCES AVAILABLE FOR
                                         THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                                         RE FORMAT
      ANSWER 7 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN
L_2
      Entered STN: 16 Apr 2004
ACCESSION NUMBER:
                                2004:310775 CAPLUS
                                 140:337902
DOCUMENT NUMBER:
                                 Use of peptide vectors to improve the immune
TITLE:
                                 response to antigens
                                 Johnson, Mark Elliott; Hamilton, Day Fiona;
INVENTOR(S):
                                 Kaczorek, Michel; Temsamani, Jamal
PATENT ASSIGNEE(S):
                                 USA
SOURCE:
                                 U.S. Pat. Appl. Publ., 21 pp.
                                 CODEN: USXXCO
DOCUMENT TYPE:
                                 Patent
LANGUAGE:
                                 English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                                        DATE
                                                        APPLICATION NO.
                                 KIND
                                           -----
                                                          -----
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                                 A1
                                                          US 2002-270010
                                                                                         20021015
      US 2004072340
                                          20040415
                                                          US 2002-270010
                                                                                         20021015
PRIORITY APPLN. INFO.:
                                 MARPAT 140:337902
OTHER SOURCE(S):
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Searcher : Shears 571-272-2528

The authors disclose conjugates of an antigen coupled to a linear

derivative of a  $\beta$ -stranded antibiotic peptide which are useful agents to enhance a cytotoxic T-cell response. The preferred vector peptides are derived from the antibiotics protegrin and tachyplesin.

IT 220696-48-0P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (as vectors for delivery of antigens)

L2 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 06 Feb 2004

ACCESSION NUMBER: 2004:97509 CAPLUS

DOCUMENT NUMBER: 140:158513

TITLE: New fusion protein used as vector

INVENTOR(S): Hwu, Paul L.

PATENT ASSIGNEE(S): Geneshuttle Biopharm Inc., Taiwan SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004035409	A2	20040205	JP 2002-140441	20020515
PRIORITY APPLN. INFO.:			JP 2002-140441	20020515

AB A delivery system is provided, which is capable of efficiently delivering a desired mol. into cells or nuclei. The delivery system is a new fusion protein, which contains: (1) a cold shock domain, its homolog, or a functionally equivalent derivative; and (2) a membrane translocation sequence, or its functionally equivalent peptide and/or its derivative

IT 220696-48-0

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (new fusion protein used as vector for efficiently delivering desired mol. into cells or nuclei)

L2 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 14 Nov 2003

ACCESSION NUMBER: 2003:892362 CAPLUS

DOCUMENT NUMBER: 139:376204

TITLE: Fusion proteins containing cold shock domains for

use as vector for delivery of desired molecules

into cells

INVENTOR(S): Hwu, Paul L.

PATENT ASSIGNEE(S): Geneshuttle Biopharma, Inc., Taiwan

SOURCE: U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003211590	A1	20031113	US 2002-144549	20020513
US 6835810	B2	20041228		

CN 1495200 A 20040512 CN 2003-123657 20030512 EP 1362917 A2 20031119 EP 2003-252970 20030513 EP 1362917 A3 20040102

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.:

US 2002-144549 A 20020513

The present invention provides a fusion protein comprising a fusion AB protein for delivery of a desired mol. into cells or nuclei. The fusion protein comprises: (1) a cold shock domain (CSD) derived from CspA and the homolog or the functional equivalent derivs. thereof; and (2) a membrane translocation sequence, protein transduction domain (PTD), or the functional equivalent peptides and/or derivs. thereof. A DNA condensation domain or a DNA-binding domain may be inserted in the cold shock domain. The simplest form of the fusion protein is comprised of the combination of nuclear localization signal (NLS)/PTD from HIV virus tat protein and CSD from CspA, which is referred to as rTAT. A second form of fusion protein is comprised of the combination of NLS/PTD from tat and DNA condensation sequence of (SPKR)4 and CSD, which is referred to as (SPKR)3-iTAT-CspA. The fusion protein is used as a vector for nucleic acids delivery in vitro and particularly in vivo for gene therapy and the production of transgenic animal.

IT 220696-48-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(membrane fusion sequence; fusion proteins containing cold shock domains for use as vector for delivery of desired mols. into cells)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 29 Aug 2003

ACCESSION NUMBER: 2003:678833 CAPLUS

DOCUMENT NUMBER: 139:219317

TITLE: Ccompositions for transporting cyclosporin

derivatives through the blood brain barrier

INVENTOR(S): Mouchet, Patrick; Rees, Anthony R.; Elmer, Eskil;

Keep, Marcus Floyd

PATENT ASSIGNEE(S): Synt:em, Fr.; Maas Biolab, L.L.C.

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT N	10.			KIND DATE			i	APPL	ICAT	ION 1	. 01		DA	ATE	
	- <b></b>	<del>-</del>			-										
WO 20030	707	55		A2		2003	0828	1	WO 2	003-	FR59	1		20	0030224
WO 20030	707	55		А3		2004	0304								
W:	ΑĖ,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,
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	NO,	NZ,	OM,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,
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RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
	ΕĒ,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,

09/857000 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG FR 2002-2299 20020222 20030829 FR 2836474 A1 FR 2836474 B1 20041224 AU 2003-229835 20030224 20030909 AU 2003229835 A1 A 20020222 FR 2002-2299 PRIORITY APPLN. INFO.: WO 2003-FR591 W 20030224 OTHER SOURCE(S): MARPAT 139:219317 The invention concerns a compound comprising at least a cyclosporin mol. and at least a peptide vector capable of transporting said mol. through the blood brain barrier. The invention also concerns the use of the compound for preparing pharmaceutical compns. in particular for treating or preventing disease of the central nervous system. Cyclosporin peptide conjugates were prepared and their transport through the blood brain barrier was demonstrated. 590362-66-6P IT RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (compns. transporting cyclosporin derivs. through blood brain barrier) 590362-68-8 IT RL: RCT (Reactant); RACT (Reactant or reagent) (compns. transporting cyclosporin derivs. through blood brain barrier) ANSWER 11 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2 Entered STN: 11 Aug 2003 ACCESSION NUMBER: 2003:613982 CAPLUS DOCUMENT NUMBER: 139:312219 Studies on the internalization mechanism of TITLE: cationic cell-penetrating peptides Drin, Guillaume; Cottin, Sylvine; Blanc, AUTHOR (S): Emmanuelle; Rees, Anthony R.; Temsamani, Jamal Institut de Genetique Moleculaire, Synt:em, CORPORATE SOURCE: Montpellier, 34293, Fr. Journal of Biological Chemistry (2003), 278(33), SOURCE: 31192-31201 CODEN: JBCHA3; ISSN: 0021-9258 American Society for Biochemistry and Molecular PUBLISHER: Biology DOCUMENT TYPE: Journal English LANGUAGE:

AB A great deal of data has been amassed suggesting that cationic peptides are able to translocate into eucaryotic cells in a temperature-independent manner. Although such peptides are widely used to promote the intracellular delivery of bioactive mols., the mechanism by which this cell-penetrating activity occurs still remains unclear. Here, we present an in vitro study of the cellular uptake of peptides, originally deriving from protegrin (the SynB peptide vectors), that have also been shown to enhance the transport of drugs across the blood-brain barrier. In parallel, we have examined the internalization process of two lipid-interacting peptides, SynB5 and pAntp-(43-58), the latter corresponding to the translocating segment of the Antennapedia homeodomain. We report a quant. study of the time- and dose-dependence of internalization and demonstrate that these peptides accumulate inside vesicular structures. Furthermore, we have examined the role of endocytotic pathways in this process using a variety of

metabolic and endocytosis inhibitors. We show that the internalization of these peptides is a temperature- and energy-dependent process and that endosomal transport is a key component of the mechanism. Altogether, our results suggest that SynB and pAntp-(43-58) peptides penetrate into cells by an adsorptive-mediated endocytosis process rather than temperature-independent translocation. 220696-48-0P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(internalization mechanism of cationic cell-penetrating peptides)
REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L2 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 01 Aug 2003

ACCESSION NUMBER: 2003:591357 CAPLUS

DOCUMENT NUMBER: 139:129110

TITLE: Nuclear-envelope and nuclear-lamina binding

chimeric protein for modulating gene expression

and therapeutic use

INVENTOR(S): Sera, Takashi

PATENT ASSIGNEE(S): Syngenta Participations Ag, Switz.

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'						KIND DATE					LICAT			- <b></b>		ATE	
		0624	47		A2		2003	0731			2003 -τ					0030	117
WO	2003																
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	, EC,	EE,	ES,	FI,	GB,	GD,	
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		NO,	NZ,	OM,	PH,	PL,	PT,	RO,	RU,	SC	, SD,	SE,	SG,	SK,	SL,	ТJ,	
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											, BG,						
											, LU,						
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	, GN,	GQ,	GW,	ML,	MR,	NE,	
			TD,											•			
CA	2472	729			AA		2003	0731		CA 2	2003-2	2472	729		2	0030	117
EP	1485	108			A2		2004	1215		EP 2	2003-1	7088	51		2	0030	117
											, IT,						
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CN	1617										2003-8						
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											2003-9						
PRIORIT											2002-3						
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										WO 2	7- E002	JS15:	29	V	<b>v</b> 2	0030	117

OTHER SOURCE(S): MARPAT 139:129110

AB The present invention is directed to nucleic acid target-specific chimeric proteins comprising a nuclear-envelope and/or nuclear-lamina binding domain and a DNA binding domain. These proteins, as well as the nucleic acids encoding those proteins, can be used in methods to repress or down-regulate expression of selected genes. The DNA binding domains are preferably from naturally-occurring zinc finger proteins (ZFPs) or artificial zinc finger proteins (AZPs). Mol. switch systems for gene regulation are also provided.

IT 220696-48-0

RL: PRP (Properties)

(unclaimed sequence; nuclear-envelope and nuclear-lamina binding chimeric protein for modulating gene expression and therapeutic use)

L2 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 25 Apr 2003

ACCESSION NUMBER: 2003:319744 CAPLUS

DOCUMENT NUMBER: 138:336406

TITLE: Antigen conjugated with  $\beta$ -stranded antibiotic

peptide for enhancing cytotoxic T lymphocyte

immune response

INVENTOR(S): Johnson, Mark Elliott; Hamilton, Day Fiona;

Kaczorek, Michel; Temsamani, Jamal

PATENT ASSIGNEE(S): SYNT:EM S.A., Fr.

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE								D	ATE	
															-		
WO	2003	0330	21		A1		2003	0424	,	WO 2	002-1	EP11:	500		2	0021	015
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	
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		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	
		NO,	NZ,	OM,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	-	
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		BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	2461	575			AA		2003	0424		CA 2	002-	2461	575		2	0021	015
EP	1436	002			A1		2004	0714		EP 2	002-	7747	11		2	0021	015
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		PT,	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK	
JP	2005	5104	84		T2		2005	0421		JP 2	003-	5358	23		2	0021	015
PRIORIT	Y APP	LN.	INFO	.:						EP 2	001-	4026	71	Ĭ	A 2	0011	016
									,	WO 2	002-	EP11	500	Ţ	N 2	0021	015

AB The invention relates to conjugates of an antigen coupled to a linear derivative of a ss-stranded antibiotic peptide, which are useful for immunogenic agents to enhance a CTL response. Two groups of preferred peptides are derived from the antibiotics protegrin and tachyplesin.

IT 220696-48-0

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antigen conjugated with  $\beta$ -stranded antibiotic peptide for enhancing cytotoxic T lymphocyte immune response)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L2 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 30 Mar 2003

ACCESSION NUMBER: 2003:244767 CAPLUS

DOCUMENT NUMBER:

138:276234

TITLE:

Compositions for transport of antibodies across the hematoencephalic barrier and their use for the diagnosis or the treatment of the diseases of the

central nervous system

INVENTOR(S):

Temsamani, Jamal; Roussele, Christophe; Rees,

Anthony R.

PATENT ASSIGNEE(S):

SYNT: EM, Fr.

SOURCE:

Fr. Demande, 25 pp.

CODEN: FRXXBL

DOCUMENT TYPE: LANGUAGE: Patent French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				APPL	ICAT:	ION I	NO.		D	ATE	
			- <b></b>			_							<b></b>		-	- <b></b> -	<b></b> -
FR	2829	940			<b>A1</b>		2003	0328	:	FR 2	001-	1244	2		2	0010	927
WO	2003	0267	00		A2		2003	0403	1	WO 2	002-	FR32	89		2	0020	926
WO	2003	0267	00		<b>A3</b>		2003	1106									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	
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		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRIORITY	RIORITY APPLN. INFO.:									FR 2	001-	1244	2	1	A 2	0010	927

#### OTHER SOURCE(S): MARPAT 138:276234

AB The present invention has as an aim a compound made up of at least one antibody or fragment of an antibody related to at least a peptide vector able to allow its transport through the hematoencephalic barrier (BBB). the invention relates also to the preparation of these compds. and pharmaceutical compns. containing them. They are useful for the diagnosis or treatment of diseases of the central nervous system.

IT 220696-48-0

RL: PRP (Properties)

(unclaimed sequence; compns. for transport of antibodies across the hematoencephalic barrier and their use for the diagnosis or the treatment of the diseases of the central nervous system)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 02 Feb 2003

ACCESSION NUMBER: 2003:78786 CAPLUS

DOCUMENT NUMBER: 138:203320

Induction of antigen-specific CTL responses using TITLE:

antigens conjugated to short peptide vectors

Day, Fiona H.; Zhang, Yu; Clair, Philippe; AUTHOR (S):

Grabstein, Kenneth H.; Mazel, Martine; Rees, Anthony R.; Kaczorek, Michel; Temsamani, Jamal Corixa Corporation, Seattle, WA, 98104, USA

CORPORATE SOURCE: Journal of Immunology (2003), 170(3), 1498-1503 SOURCE:

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal LANGUAGE: English

Linear peptides (SynB vectors) with specific sequence motifs have been identified that are capable of enhancing the transport of a wide range of mols. into cells. These peptide vectors have been used to deliver exogenous peptides and protein Ags across the cell membrane and into the cytoplasm of cells. Specifically, in vitro anal. indicated that these SynB peptides enhanced the uptake of two 9-mer peptide Ags, NP147-155 and Mtb250-258 (T cell epitopes of influenza nucleoprotein and Mycobacterium tuberculosis, resp.) and the M. tuberculosis Ag Mtb8.4 protein, into K562 cells when covalently linked to the resp. Ags. Furthermore, selected SynB vectors, when conjugated to these same Ags and used as immunogens, resulted in considerably enhanced Ag-specific CTL responses. Several SynB vectors were tested and resulted in varying levels of cellular uptake. The efficiency of uptake correlated with the ability of the SynB construct to deliver each epitope in vivo and induce specific CTL responses in mice. These data suggest that peptide vectors, such as SynB that transport target Ags across the cell membrane in a highly efficient manner, have significant potential for vaccine delivery.

220696-48-0 ΙT

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antigens conjugated to short peptide vectors in induction of antigen-specific CTL responses)

THERE ARE 48 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 48 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

Entered STN: 08 Nov 2002

ACCESSION NUMBER: 2002:849790 CAPLUS

DOCUMENT NUMBER: 137:358084

Lipid-comprising drug delivery complexes and TITLE:

methods for their production

Harvie, Pierrot; Paul, Ralph; Cudmore, Sally; INVENTOR (S):

O'Mahony, Daniel J.

PATENT ASSIGNEE(S): Targeted Genetics Corporation, USA; Emerald Gene

Systems, Ltd.

PCT Int. Appl., 259 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002088318	A2	20021107	WO 2002-US13609	20020430
WO 2002088318	A3	20030515		

571-272-2528 Searcher Shears

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                   CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                   SN, TD, TG
       CA 2445947
                                               20021107
                                                                 CA 2002-2445947
                                                                                                   20020430
                                                                 AU 2002-256398
       AU 2002256398
                                      A2
                                               20021111
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                                                                 US 2002-136187
       US 2003203865
                                      A1
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       EP 1383480
                                      A2
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                  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                 JP 2002-585601
       JP 2004535388
                                      T2
                                               20041125
                                                                                                   20020430
       US 2005025821
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                                                                                                   20040520
                                                                 US 2001-287786P
PRIORITY APPLN. INFO.:
                                                                                              P 20010430
                                                                 US 2002-136187
                                                                                              A1 20020430
                                                                                              W 20020430
                                                                 WO 2002-US13609
       Novel stable, concentrated, biol. active and ready-to-use lipid-comprising
AB
       drug delivery complexes and methods for their production are described.
       The complexes of the invention comprise a drug, at least one lipid
       species, optionally at least one polycation, and at least one
       targeting factor. The at least one lipid species may comprise a
```

pegylated lipid. The complexes of the invention may provoke lower levels of inflammatory cytokines such as tumor necrosis factor- $\alpha$  $(TNF-\alpha)$ . The method described herein provides for the large scale production of lipid-comprising drug delivery systems useful for gene therapy and other applications.

IT 220696-48-0

RL: PRP (Properties)

(unclaimed sequence; lipid-comprising drug delivery complexes and methods for their production)

ANSWER 17 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2

Entered STN: 11 Jun 2002

ACCESSION NUMBER: 2002:434858 CAPLUS

DOCUMENT NUMBER: 138:192982

Improved brain delivery of benzylpenicillin with a TITLE:

peptide-vector-mediated strategy

Rousselle, Christophe; Clair, Philippe; Temsamani, AUTHOR (S):

Jamal; Scherrmann, Jean-Michel

CORPORATE SOURCE: Synt:em, Parc Scientifique Georges Besse, Nimes,

30000, Fr.

Journal of Drug Targeting (2002), 10(4), 309-315 SOURCE:

CODEN: JDTAEH; ISSN: 1061-186X

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Previous studies from our laboratory have demonstrated that the coupling of doxorubicin with SynB1 vector dramatically increases its brain uptake. In the present study, we have evaluated the broad application of this approach using another mol.: benzylpenicillin (B-Pc). We, therefore, have coupled the β-lactam antibiotic B-Pc with SynB1 and assessed its ability to cross the blood-brain barrier (BBB) using the in situ

> Shears 571-272-2528 Searcher :

rat brain perfusion method. We first confirmed the very low brain uptake of free radiolabeled B-Pc. When B-Pc was coupled to SynB1, its uptake in brain was increased by a factor of 7, without compromising the BBB integrity. The vectorized B-Pc was distributed in all the gray areas assessed (frontal, parietal, and occipital cortex, thalamus, hippocampus, and striatum). Moreover, using a wash-out procedure and a capillary depletion method, we have shown that the radiolabeled B-Pc was associated mainly with brain parenchyma. In summary, this study demonstrates the successful application of the use of SynB1 vector for the transport of B-Pc across the BBB.

IT 273216-96-9P

> RL: PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(improved brain delivery of benzylpenicillin with peptide-vector-mediated strategy)

220696-48-0 IT

> RL: RCT (Reactant); RACT (Reactant or reagent) (improved brain delivery of benzylpenicillin with

peptide-vector-mediated strategy)

THERE ARE 28 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 28 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 18 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2

Entered STN: 11 Jan 2002

2002:31484 CAPLUS ACCESSION NUMBER:

136:90985 DOCUMENT NUMBER:

Amphipathic linear peptides and compositions TITLE:

containing same

Drin, Guillaume; Gomar, Jerome; Temsamani, Jamal; INVENTOR(S):

Rees, Anthony R.

Synt:em S.A., Fr. PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent French LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			APPLICATION NO.	
<del>-</del>				
WO 2002002595	A1	20020110	WO 2001-FR2129	20010703
W: AE, A	G, AL, AM, A	T, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH,
CN, C	O, CR, CU, C	Z, DE, DK,	DM, DZ, EC, EE, ES,	FI, GB, GD,
GE, G	H, GM, HR, H	U, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ,
LC, I	K, LR, LS, L'	T, LU, LV,	MA, MD, MG, MK, MN,	MW, MX, MZ,
NO, N	IZ, PL, PT, RO	O, RU, SD,	SE, SG, SI, SK, SL,	TJ, TM, TR,
			YU, ZA, ZW, AM, AZ,	
MD, F	U, TJ, TM			
RW: GH, C	M, KE, LS, M	W, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH,
			GR, IE, IT, LU, MC,	
			GA, GN, GW, ML, MR,	
			FR 2000-8633	
FR 2810985				
CA 2414355	AA	20020110	CA 2001-2414355	20010703
			EP 2001-951760	
			GB, GR, IT, LI, LU,	
			MK, CY, AL, TR	
			JP 2002-507847	20010703

20031002 US 2003186890 Al US 2003-336312 20030103 A 20000703 PRIORITY APPLN. INFO.: FR 2000-8633

> W 20010703 WO 2001-FR2129

AB The invention concerns peptides containing or consisting of an antibiotic peptide by (i) modification of cysteine residues so that said peptide is devoid of disulfide bond, (ii) substitution of 1 to 18 and preferably of 1 to 5 amino acids, and/or permutation of at least a pair of amino acids, said substitutions and/or permutations being such that said peptide has an amphipathic character. The invention also concerns a compound formed by at least one of said peptide directly or indirectly bound to at least an active substance.

IT 220696-48-0

> RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amphipathic linear antibiotic peptides and compns. containing same) THERE ARE 4 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

ANSWER 19 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2

Entered STN: 18 Mar 2001

ACCESSION NUMBER: 2001:186402 CAPLUS

DOCUMENT NUMBER: 135:40598

TITLE: Doxorubicin-peptide conjugates overcome multidrug

resistance

AUTHOR (S): Mazel, Martine; Clair, Philippe; Rousselle,

Christophe; Vidal, Pierre; Scherrmann,

Jean-Michel; Mathieu, Daniele; Temsamani, Jamal

CORPORATE SOURCE: Synt:em, Parc Scientifique Georges Besse, Nimes,

30000, Fr.

SOURCE: Anti-Cancer Drugs (2001), 12(2), 107-116

CODEN: ANTDEV; ISSN: 0959-4973

Lippincott Williams & Wilkins PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

A well-known mechanism leading to the emergence of multidrug-resistant tumor cells is the overexpression of P-qlycoprotein (P-qp), which is capable of lowering intracellular drug concns. To overcome this problem, the authors tested the capability of two peptide vectors that are able to cross cellular membranes to deliver doxorubicin in P-gp-expressing cells. The antitumor effect of peptide-conjugated doxorubicin was tested in human erythroleukemic (K562/ADR) resistant cells. The conjugate showed potent dose-dependent inhibition of cell growth against K562/ADR cells as compared with doxorubicin alone. Doxorubicin exhibited IC50 concns. of 65 µM in the resistant cells, whereas vectorized doxorubicin was more effective with IC50 concns. of 3 μM. After treatment of the resistant cells with verapamil, the intracellular levels of doxorubicin were markedly increased and consequent cytotoxicity was improved. In contrast, treatment of resistant cells with verapamil did not cause any further enhancement in the cell uptake nor in the cytotoxic effect of the conjugated doxorubicin, indicating that the conjugate bypasses the P-gp. Finally, the authors show by the in situ brain perfusion method in P-gp-deficient and competent mice that vectorized doxorubicin bypasses the P-gp present at the luminal site of the blood-brain barrier. These results indicate that vectorization of doxorubicin with peptide vectors is effective in overcoming multidrug resistance.

IT 220696-48-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(doxorubicin-peptide conjugates overcome multidrug resistance)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L2 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 04 Jan 2001

ACCESSION NUMBER: 2001:8426 CAPLUS

DOCUMENT NUMBER: 134:256702

TITLE: Enhanced delivery of doxorubicin into the brain

via a peptide-vector-mediated strategy: saturation

kinetics and specificity

AUTHOR(S): Rousselle, Christophe; Smirnova, Maria; Clair,

Philippe; Lefauconnier, Jeanne-Marie; Chavanieu, Alain; Calas, Bernard; Scherrmann, Jean-Michel;

Temsamani, Jamal

CORPORATE SOURCE: Institut National de la Sante et da la Recherche

Medicale U26, Hopital Fernand Widal, Paris, Fr.

SOURCE: Journal of Pharmacology and Experimental

Therapeutics (2001), 296(1), 124-131

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

Doxorubicin delivery to the brain is often restricted because of the poor transport of this therapeutic mol. through the blood-brain barrier (BBB). To overcome this problem, we have recently developed a technol., Pep:trans, based on short natural-derived peptides that are able to cross efficiently the BBB without compromising its integrity. In this study, we have used the in situ mouse brain perfusion method to evaluate the brain uptake of free and vectorized doxorubicin. Doxorubicin was coupled covalently to small peptide vectors: L-SynB1 (18 amino acids), L-SynB3 (10 amino acids), and its enantiomeric form D-SynB3. We first confirmed the very low brain uptake of free radiolabeled doxorubicin, which is most likely due to the efflux activity of the P-qlycoprotein at the level of the BBB. Vectorization with either L-SynB1, L-SynB3, or D-SynB3 significantly increased the brain uptake of doxorubicin (about 30-fold). We also investigated the mechanism of transport of vectorized doxorubicin. We show that vectorized doxorubicin uses a saturable transport mechanism to cross the BBB. The effect of poly(L-lysine) and protamine, endocytosis inhibitors, on the transport across the brain was also investigated. Both inhibitors reduced the brain uptake of vectorized doxorubicin in a dose-dependent manner. These studies indicate that the transport of vectorized doxorubicin appears to occur via an adsorptive-mediated endocytosis.

#### IT 273216-92-5P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(enhanced delivery of doxorubicin into the brain via a

peptide-vector-mediated strategy)

# IT 220696-48-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(enhanced delivery of doxorubicin into the brain via a peptide-vector-mediated strategy)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2

Entered STN: 09 Jun 2000

ACCESSION NUMBER: 2000:383986 CAPLUS

DOCUMENT NUMBER:

133:26845

TITLE: Anti-cancer agent conjugated to a peptide for

treatment of cancer

INVENTOR(S): Temsamani, Jamal; Kaczorek, Michel; Colin De

Verdiere, Annik

PATENT ASSIGNEE(S):

Synt:em (S.A.), Fr. PCT Int. Appl., 34 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT 1	NO.			KIND DATE						ICAT		NO.		D	ATE
WO	2000	0322											39		1	9991126
	W:	ΑE,	AL,	AM,	AΤ,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
		CU,	CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
											ΚZ,					
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,
											TT,					
											MD,					
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,
											MR,					
FR	FR 2786398															9981130
FR	FR 2786398						2002	1227								
CA	2352	134			AA		2000	0608		CA 1	999-	2352	134		1	9991126
	1135															9991126
EP	1135	169			В1		2003	0212								
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,
		PT,	IE,	SI,	LT,	LV,	FI,	RO								
JP	2002	5380	80		T2		2002	1112		JP 2	2000-	5849	26		1	.9991126
AT	2323	98			E		2003	0215		AT 1	999-	9729	32		1	9991126
PT	1135	169			${f T}$		2003	0630		PT 1	.999-	9729	32		1	.9991126
	2192						2003	1001		ES 1	999-	9729	32		1	9991126
AU	7697	66			В2		2004	0205		AU 2	-000	1391	1		1	9991126
	ORITY APPLN. INFO.:									FR 1	998-	1507	3		A 1	.9981130
										WO 1	999-	FR29	39		W 1	9991126

The invention concerns a pharmaceutical composition for treating and/or AB preventing cancer comprising at least an anti-cancer agent, characterized in that said anti-cancer agent is associated in the composition

with at least a peptide capable of carrying said agent into the cancer cells and prevent the occurrence of chemoresistance to said agent. Doxorubicin was conjugated to a peptide and its activity against doxorubicin-resistance cell (K562/ADR) was studied. The IC50 of the doxorubicin-peptide conjugate was 2 as compared to 70  $\mu M$  for unconjugated doxorubicin.

273216-92-5P IT

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anti-cancer agent conjugated to peptide for treatment of cancer)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L2 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 09 Jun 2000

ACCESSION NUMBER: 2000:383984 CAPLUS

DOCUMENT NUMBER: 133:12772

TITLE: Peptides carrying substances across the blood

brain barrier

INVENTOR(S): Clair, Philippe; Kaczorek, Michel; Temsamani,

Jamal

PATENT ASSIGNEE(S): Synt:em (S.A.), Fr. SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT							KIND DATE			APPLICATION NO.						DATE	
WO	2000					WO 1	999-1		19991126								
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	
											GD,						
											ΚZ,						
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	
		VN,	YU,	ZA,	ZW												
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
FR	R 2786397				A1 20000602			FR 1998-15074						19981130			
	2786																
CA	A 2352491			AA 20000608			CA 1999-2352491						19991126				
EP	? 1135168			A1 20010926			EP 1999-972931						19991126				
EP	1135168			B1 20050420													
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	
		PT,	ΙE,	SI,	LT,	LV,	FI,	RO									
JP 2002531420									JP 2000-584925								
	7778						2004	1104		AU 2	000-	1391	0		1	9991126	
AT 293460								AT 1999-972931									
	1135															9991126	
ES	2242	453			Т3		2005	1101								9991126	
IORITY	APP	LN.	INFO	. :						FR 1	998-	1507	4		A 1	9981130	
									1	WO 1	999-	FR29	38	1	W 1	9991126	

OTHER SOURCE(S): MARPAT 133:12772

AB The invention concerns the use of a linear peptide paired with an active substance for diagnosing or treating a CNS pathol. by preparing a medicine capable of crossing the blood brain barrier to be used for diagnosis or treatment of a pathol. localized in the CNS. Doxorubicin was conjugated to a peptide and its penetration to CNS of anesthetized rats was studied. The penetration of doxorubicin-peptide conjugate was 5-7 time more than unconjugated doxorubicin.

IT 220696-48-0DP, disulfide-linked with Dalargine

273216-92-5P 273216-96-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(peptides carrying substances across blood brain barrier)

THERE ARE 7 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

ANSWER 23 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN L2

Entered STN: 07 Apr 2000

2000:223276 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 133:79176

New advances in the transport of doxorubicin TITLE:

through the blood-brain barrier by a peptide

vector-mediated strategy

Rousselle, Christophe; Clair, Philippe; AUTHOR (S):

Lefauconnier, Jeanne-Marie; Kaczorek, Michel;

Scherrmann, Jean-Michel; Temsamani, Jamal

CORPORATE SOURCE: Institut National de la Sante et de la Recherche

Medicale U26, Institut National de la Sante et de la Recherche Medicale U26, Hopital Fernand Widal,

Paris, Fr.

Molecular Pharmacology (2000), 57(4), 679-686 SOURCE:

CODEN: MOPMA3; ISSN: 0026-895X

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

Journal DOCUMENT TYPE: English LANGUAGE:

Many therapeutic drugs are excluded from entering the brain, due to their lack of transport through the blood-brain barrier (BBB). overcome this problem, we have developed a novel method in which short, naturally derived peptides (16-18 amino acids) cross the cellular membranes of the BBB with high efficiency and without compromising its integrity. The antineoplastic agent doxorubicin (dox) was coupled covalently to two peptides, D-penetratin and SynB1. The ability of dox to cross the BBB was studied using an in situ rat brain perfusion technique and also by i.v. injection in mice. In the brain perfusion studies, we first confirmed the very low brain uptake of free radiolabeled dox because of the efflux activity of P-qlycoprotein at the BBB. By contrast, we have demonstrated that when dox is coupled to either the D-penetratin or SynB1 vectors, its uptake was increased by a factor of 6, suggesting that the vectorized dox bypasses P-glycoprotein. Moreover, using a capillary depletion method, we have shown that vectorization of dox led to a 20-fold increase in the amount of dox transported into brain parenchyma. administration of vectorized dox at a dose of 2.5 mg/kg in mice led to a significant increase in brain dox concns. during the first 30 min of postadministration, compared with free dox. Addnl., vectorization led to a significant decrease of dox concns. in the heart. In summary, our results establish that the two peptide vectors used in this study enhance the delivery of dox across the BBB.

220696-48-0D, conjugates with doxorubicin 279247-76-6D IT

, conjugates with doxorubicin

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES

(transport of doxorubicin through blood-brain barrier by peptide vector-mediated strategy)

> Shears 571-272-2528 Searcher :

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L2 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 26 Feb 1999

ACCESSION NUMBER: 1999:126919 CAPLUS

DOCUMENT NUMBER: 130:193956

TITLE: Linear peptides derived from antibiotic peptides

and conjugates thereof for introducing bioactive

materials into cells

INVENTOR(S): Calas, Bernard; Grassy, Gerard; Chavanieu, Alain;

Kaczorek, Michel

PATENT ASSIGNEE(S): Synt:em (S.A.), Fr.

SOURCE: PCT Int. Appl., 37 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

				APPLICATION NO.						DATE							
WO	WO 9907728					A2 19990218			WO 1998-FR1757						19980806		
WO	9907728				A3 19990624												
	W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	
		DE,	DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	
											LT,						
											SD,						
											YU,						
			MD,														
	RW:	GH.	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DΕ,	DK,	
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FR	FR 2767323					A1 19990219			FR 1997-10297						19970812		
	B1 20010105																
CA							AA 19990218			CA 1998-2298932						9980806	
									EP 1998-941556								
																MC,	
			IE,		•	•											
JР	JP 2001512739						T2 20010828			JP 2000-506230					1	9980806	
	7546						2002	1121			998-					9980806	
	PRIORITY APPLN. INFO.:									FR 1	997-	1029	7		A 1	9970812	
										WO 1	998-	FR17	57		W 1	9980806	

OTHER SOURCE(S): MARPAT 130:193956

AB The invention concerns peptides derived from antibiotic peptides or analogs thereof, characterized in that they are devoid of sulfide bonds. The invention also concerns the use of these linear peptides for vectoring chemical substances and chemical compds. formed by said peptides coupled with at least an active substance. The invention further concerns the preparation of said peptides and compns. containing them.

Variants of protegrin PG-1, tachyplesin 1 and polyphemusin were prepared and their uptake by various normal and tumor cells were analyzed. In general, uptake varied from cell to cell. Augmentation of the hydrophobicity of the peptide decreased uptake while augmentation of amphipathic characteristics increased uptake. A conjugate of

Searcher: Shears 571-272-2528

doxorubicin with a protegrin derivative was internalized by MCF7 cells.

# IT 220696-48-0D, conjugates

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(linear peptides derived from antibiotic peptides and conjugates thereof for introducing bioactive materials into cells)

FILE 'MEDLINE' ENTERED AT 14:19:41 ON 23 MAY 2006

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L3 0 L1

=> fil hom FILE 'HOME' ENTERED AT 14:19:57 ON 23 MAY 2006

=> d his ful

(FILE 'HOME' ENTERED AT 14:17:08 ON 23 MAY 2006) SET COST OFF

FILE 'REGISTRY' ENTERED AT 14:17:22 ON 23 MAY 2006
L1 7 SEA ABB=ON PLU=ON RGGRLSYSRRRFSTSTGR/SOSP

FILE 'REGISTRY' ENTERED AT 14:19:26 ON 23 MAY 2006 D 1-7 .BEVREG1

FILE 'CAPLUS' ENTERED AT 14:19:29 ON 23 MAY 2006 L2 24 SEA ABB=ON PLU=ON L1 D 1-24 .BEVSTR

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 14:19:41 ON 23 MAY 2006 L3 0 SEA ABB=ON PLU=ON L1

FILE 'HOME' ENTERED AT 14:19:57 ON 23 MAY 2006

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 MAY 2006 HIGHEST RN 885262-53-3 DICTIONARY FILE UPDATES: 22 MAY 2006 HIGHEST RN 885262-53-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*

\* The CA roles and document type information have been removed from \*

\* the IDE default display format and the ED field has been added, \*

\* effective March 20, 2005. A new display format, IDERL, is now \*

\* available and contains the CA role and document type information. \*

Structure search iteration limits have been increased. See HELP SLIMI for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CAPLUS

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http://www.cas.org/infopolicy.html

#### FILE MEDLINE

- L1

FILE LAST UPDATED: 20 MAY 2006 (20060520/UP). FILE COVERS 1950 TO DA

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>). See also:

http://www.nlm.nih.gov/mesh/

http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\_mesh.html

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05\_med\_data\_changes.ht

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05\_2006\_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

### FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 17 May 2006 (20060517/ED)

#### FILE EMBASE

FILE COVERS 1974 TO 23 May 2006 (20060523/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.